

Claims

[001] Low hot-melt adhesive composition used in non-woven assemblies, comprising
a) 100 parts by weight of a block copolymer of the formula S-(I/B)-S, wherein S represents a predominantly poly(styrene) block and (I/B) represents a polymer block obtained by at random copolymerization of a mixture of predominantly isoprene and butadiene in a weight ratio in the range of from 60:40 to 40:60, wherein the total block copolymer has an apparent molecular weight in the range of from 124.000 to 145.000 and has a poly(styrene) content of from 30 to 34 wt% and a coupling efficiency of from 60 to 100 %,
b) from 250 to 300 parts by weight of a tackifying resin,
c) from 5 to 150 parts by weight of a plasticizer , and
d) from 1 to 3 parts by weight of auxiliaries, such as stabilizers and/or antioxidants.

[002] Low hot-melt viscosity adhesive composition according to claim 1, wherein the (I/B) block has a vinyl content in the polymerized butadiene in the range of from 7 to 9 wt% and a vinyl content in the polymerized isoprene in the range of from 4 to 6 wt%.

[003] Low hot-melt viscosity adhesive composition according to claim 1, wherein from 250 to 280 parts by weight of hydrocarbon resin per 100 parts by weight of block copolymer have been included.

[004] Disposable articles such as infant and adult diapers or sanitary napkins, incontinent pads, bed pads, feminine pads, panty shields, comprising at least one non-woven element and assembled by the use of the low hot-melt viscosity adhesive composition according to claims 1-3.

[005] Block copolymers of the formula S-(I/B)-S, wherein S represents a predominantly poly(styrene) block and (I/B) represents a polymer block obtained by at random copolymerization of a mixture of predominantly isoprene and butadiene in a weight ratio in the range of from 60:40 to 40:60, wherein the total block copolymer has an apparent molecular weight in the range of from 124.000 to 145.000 and has a poly(styrene) content of from 30 to 34 wt% and a coupling efficiency of from 60 to 100 %.

[006] Block copolymers according to claim 5, wherein the S blocks have been derived from pure styrene.

[007] Block copolymers according to claim 6, wherein the (I/B) block has a vinyl content in the polymerized butadiene in the range of from 7 to 9 wt% and a vinyl content in the polymerized isoprene in the range of from 4 to 6 wt%.